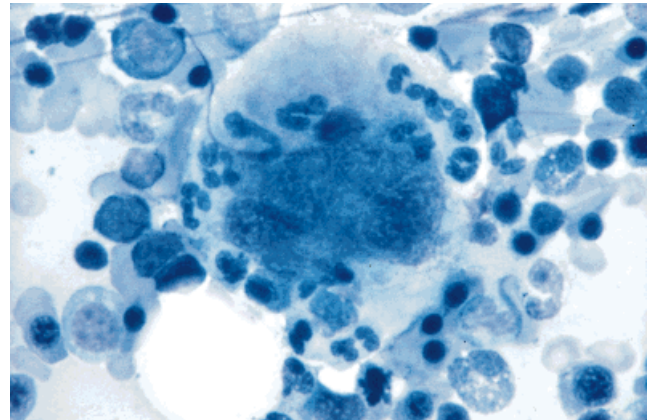
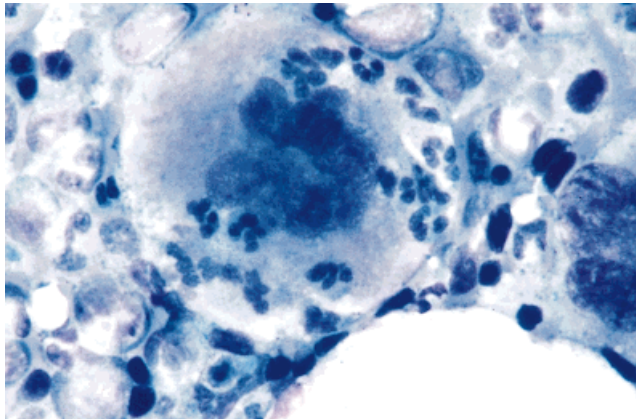


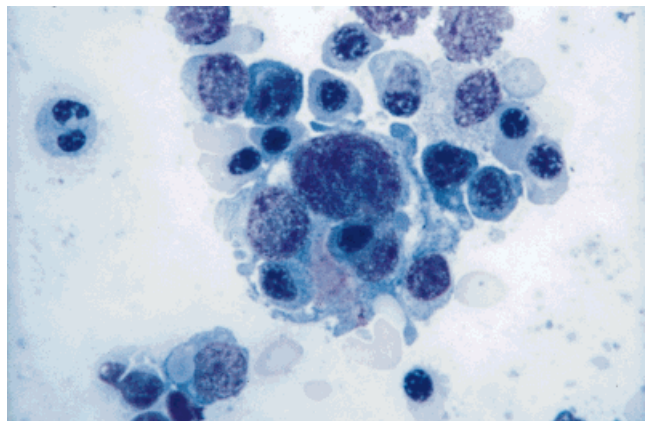
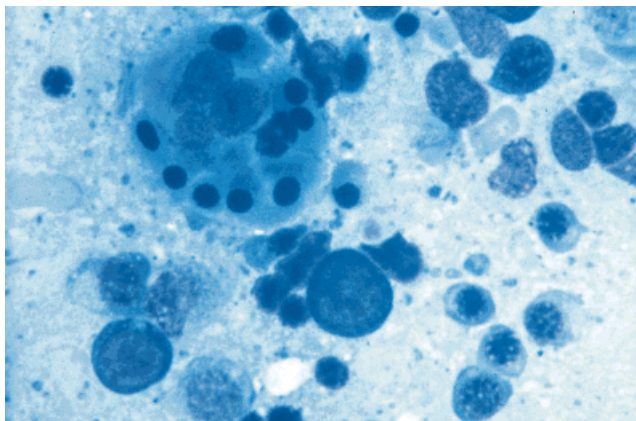
## Emperipolesis

K. Samii\* and E. Pasteur

Department of Internal Medicine, Division of Hematology, Hospital Cantonal, Geneva, Switzerland



**Case 1.** Emperipolesis in a patient with lymphoma. A 77-year-old female patient suffering for 6 months before hospitalization from asthenia, anorexia, and weight loss. Clinical examination revealed superficial adenopathies and hepatosplenomegaly. Abdominal CT showed the presence of a large mesenteric mass and numerous retroperitoneal adenopathies. Bone marrow aspiration and biopsy confirmed the diagnosis of B-non-Hodgkin lymphoma. These two photos clearly show the phenomenon of emperipolesis with numerous megakaryocytes containing polynuclear neutrophils.



**Case 2.** Emperipolesis in a patient with RAEBT. A 63-year-old man hospitalized for asthenia. Peripheral blood analysis revealed severe pancytopenia. Bone marrow examination confirmed the diagnosis of refractory anemia with excess of blasts in transformation. The two photos show the phenomenon of emperipolesis with numerous megakaryocytes containing erythroid precursors, as well as considerable medullary fibrosis.

Marrow cells may enter megakaryocytes by a phenomenon that is referred to as emperipolesis. While the morphological appearance of this process is quite striking, its etiology and pathophysiological significance is uncertain.

Emperipolesis is most often described in association with neoplastic disorders. Two images in which emperipolesis was found in the bone marrow are shown here:

the first is a 77-year-old woman with a malignant lymphoma and the second is a 63-year-old man with myelodysplasia.

\*Correspondence to: K. Samii, M.D., Dept. de Medecine Interne/ Division d'Hematologie Hopital Cantonal, Centre de Transfusion Sanguine, Rue Micheli-du-Crest 24, CH-1211 Geneve 14, Switzerland.